SIN-CHN
SCIENTIFIC PRESS PTE.LTD.

Article

Immune cell phenotypes and eating disorders: To find causal relationship through Mendelian randomization study

Supplementary file

Table S1. Heterogeneity test result of the study.

Exposure	Outcome	Method	Q	Q_df	Q_pval
CD39+ resting CD4 regulatory T cell	Eating disorders	MR Egger	6.21	5	0.29
CD39+ resting CD4 regulatory T cell	Eating disorders	Inverse variance weighted	6.23	6	0.4
Secreting CD4 regulatory T cell	Eating disorders	MR Egger	6.58	4	0.16
Secreting CD4 regulatory T cell	Eating disorders	Inverse variance weighted	6.59	5	0.25
Activated & resting CD4 regulatory T cell	Eating disorders	MR Egger	6.62	4	0.16
Activated & resting CD4 regulatory T cell	Eating disorders	Inverse variance weighted	6.62	5	0.25
Activated & secreting CD4 regulatory T cell	Eating disorders	MR Egger	7.78	6	0.25
Activated & secreting CD4 regulatory T cell	Eating disorders	Inverse variance weighted	7.97	7	0.34
Monocytic Myeloid-Derived Suppressor Cells Absolute Count	Eating disorders	MR Egger	1.71	3	0.64
Monocytic Myeloid-Derived Suppressor Cells Absolute Count	Eating disorders	Inverse variance weighted	2.35	4	0.67
Effector Memory CD8+ T cell %CD8+ T cell	Eating disorders	MR Egger	1.65	2	0.44
Effector Memory CD8+ T cell %CD8+ T cell	Eating disorders	Inverse variance weighted	2.38	3	0.5
Effector Memory CD4-CD8- T cell Absolute Count	Eating disorders	MR Egger	5.79	2	0.55
Effector Memory CD4-CD8- T cell Absolute Count	Eating disorders	Inverse variance weighted	6.07	3	0.11
Effector Memory CD4-CD8- T cell %CD4-CD8- T cell	Eating disorders	MR Egger	3.52	2	0.17
Effector Memory CD4-CD8- T cell %CD4-CD8- T cell	Eating disorders	Inverse variance weighted	3.76	3	0.29
CD25 on IgD+ CD38- B cell	Eating disorders	MR Egger	0.35	1	0.55
CD25 on IgD+ CD38- B cell	Eating disorders	Inverse variance weighted	0.44	2	0.8
CD25 on IgD- CD38dim B cell	Eating disorders	MR Egger	0.2	1	0.65
CD25 on IgD- CD38dim B cell	Eating disorders	Inverse variance weighted	0.62	2	0.73
CD27 on IgD+ CD38- unswitched memory B cell	Eating disorders	MR Egger	3.44	3	0.33
CD27 on IgD+ CD38- unswitched memory B cell	Eating disorders	Inverse variance weighted	3.65	4	0.46
CD27 on memory B cell	Eating disorders	MR Egger	5.35	5	0.37
CD27 on memory B cell	Eating disorders	Inverse variance weighted	5.49	6	0.48
CD38 on transitional B cell	Eating disorders	MR Egger	1.89	3	0.59
CD38 on transitional B cell	Eating disorders	Inverse variance weighted	2.98	4	0.56
CD3 on secreting CD4 regulatory T cell	Eating disorders	MR Egger	0.4	1	0.52
CD3 on secreting CD4 regulatory T cell	Eating disorders	Inverse variance weighted	1.72	2	0.42
CD3 on CD4 regulatory T cell	Eating disorders	MR Egger	0.45	1	0.5
CD3 on CD4 regulatory T cell	Eating disorders	Inverse variance weighted	1.65	2	0.44
CD80 on myeloid Dendritic Cell	Eating disorders	MR Egger	2.12	2	0.35
CD80 on myeloid Dendritic Cell	Eating disorders	Inverse variance weighted	2.43	3	0.49
CD80 on CD62L+ myeloid Dendritic Cell	Eating disorders	MR Egger	0.11	1	0.74
CD80 on CD62L+ myeloid Dendritic Cell	Eating disorders	Inverse variance weighted	0.33	2	0.85

Table S1. (*Continued*).

Exposure	Outcome	Method	Q	Q_df	Q_pval
CD4RA on Terminally Differentiated CD4+ T cell	Eating disorders	MR Egger	0.5	1	0.48
CD4RA on Terminally Differentiated CD4+ T cell	Eating disorders	Inverse variance weighted	0.55	2	0.76
CD8 on CD28- CD8+ T cell	Eating disorders	MR Egger	0.005	1	0.94
CD8 on CD28- CD8+ T cell	Eating disorders	Inverse variance weighted	2.41	2	0.3
CD8 on CD39+ CD8+ T cell	Eating disorders	MR Egger	2.46	3	0.48
CD8 on CD39+ CD8+ T cell	Eating disorders	Inverse variance weighted	2.55	4	0.64

Table S2. Pleiotropy test result of the study.

Exposure	Outcome	Egger_intercept	se	Pval
CD39+ resting CD4 regulatory T cell	Eating disorders	−0.006	0.041	0.89
Secreting CD4 regulatory T cell	Eating disorders	−0.0022	0.044	0.96
Activated & resting CD4 regulatory T cell	Eating disorders	0.0015	0.044	0.97
Activated & secreting CD4 regulatory T cell	Eating disorders	0.014	0.038	0.71
Monocytic Myeloid-Derived Suppressor Cells Absolute Count	Eating disorders	0.075	0.093	0.48
Effector Memory CD8+ T cell %CD8+ T cell	Eating disorders	−0.029	0.034	0.48
Effector Memory CD4-CD8- T cell Absolute Count	Eating disorders	0.027	0.088	0.79
Effector Memory CD4-CD8- T cell %CD4-CD8- T cell	Eating disorders	0.053	0.14	0.75
CD25 on IgD+ CD38- B cell	Eating disorders	0.021	0.067	0.81
CD25 on IgD- CD38dim B cell	Eating disorders	0.036	0.055	0.63
CD27 on IgD+ CD38- unswitched memory B cell	Eating disorders	−0.038	0.09	0.7
CD27 on memory B cell	Eating disorders	−0.027	0.076	0.73
CD38 on transitional B cell	Eating disorders	0.051	0.049	0.37
CD3 on secreting CD4 regulatory T cell	Eating disorders	−0.13	0.11	0.46
CD3 on CD4 regulatory T cell	Eating disorders	−0.12	0.11	0.47
CD80 on myeloid Dendritic Cell	Eating disorders	0.043	0.08	0.64
CD80 on CD62L+ myeloid Dendritic Cell	Eating disorders	0.039	0.084	0.72
CD4RA on Terminally Differentiated CD4+ T cell	Eating disorders	0.009	0.042	0.86
CD8 on CD28- CD8+ T cell	Eating disorders	0.35	0.23	0.36
CD8 on CD39+ CD8+ T cell	Eating disorders	0.028	0.099	0.79